AMENDMENTS to the DRAWINGS

No amendments or changes to the Drawings are proposed.

REMARKS

Nature of Amendment

In the present amendment, we have amended claims 8 - 13 directed towards a method embodiment of our invention, and we cancelled all other pending claims from further consideration in this application. Please note that we are not conceding that the subject matter encompassed by the cancelled claims prior to this Amendment are not patentable as argued by the Examiner in the Office Action. Amendment and cancellation of these claims are made solely to facilitate expeditious prosecution of at least a portion of allowable subject matter in this application.

We respectfully reserve the right to pursue claims, including the subject matter encompassed by the cancelled claims, as present prior to this Amendment and additional claims in one or more continuing applications.

Objection to the Specification

Regarding the objection to the specification for not defining the term "computer readable medium", these claims have been cancelled from consideration in the present application as discussed in the preceding paragraph.

Objection to Claim 19

Regarding the objection to Claim 19 for the typographical error, this claim has been cancelled from consideration in the present application as discussed in the preceding paragraph.

Rejections under 35 U.S.C. §112

With respect to the rejection of claim 8 for failing to comply with the written description requirement regarding disclosure of our real-time attribute being in a format incompatible with a directory access request return format and then to receive compatible format, we respectfully disagree and ask the Examiner to reconsider our disclosure, especially at (paragraph numbers are as published by the USPTO):

> [0004] In the 1970s, many **proprietary** communications, computing, and data storage systems developed were **incompatible with each other**.
>
> . . .
>
> [0011] Practically every major supplier of computing platforms, be it operating systems, storage solutions, or entire enterprise computing environments, has a **directory service product**. However, many of the early directory service products and protocols were **also proprietary and**

> **incompatible** from one vendor to another.
>
> [0012] In 1988, the **CCITT created the X.500** standard for directory services. X.500 organizes directory entries in a hierarchical name space capable of supporting large amounts of information. To ease the information retrieval process, it also defines the powerful search capabilities. Therefore, X.500 is often used together with add-on modules for **interoperation between incompatiable directory services** because of its functionality and scalability.
>
> . . .
>
> [0057] FIG. 4 provides an example of two applications accessing values of attributes in an LDAP directory with further illustration of **converting dynamic data for storage as static data in the LDAP directory**.
>
> . . .
>
> [0087] It is important to note that the value "82 F" was never actually stored in or retrieved from the LDAP directory. In this manner, the handling of dynamic data is transparent.- any requesting client, thereby providing a powerful extension to the directory server protocol to allow reading of dynamic data without changing or extending the protocol itself (e.g. client applications are **backwards compatible** to our improved directory server).
>
> . . .
>
> [0137] (e) the interface between the requesting application client and the directory server is unchanged, allowing **backwards compatibility with legacy applications and protocol stacks**; and . . .

We believe our discussion of the history of incompatible directory servers and the evolution of open directory access protocols such as LDAP is likely sufficient for one of ordinary skill in the art to interpret our term "compatible" and "not compatible" with such a protocol. We have disclosed obtaining a data value from a source *outside an LDAP directory,* and thus it would not be in a format yet to either be stored in the LDAP directory or returned as a return parameter to a LDAP access request. So, we have also disclosed *converting* that value to a format compatible with a directory access protocol return parameter.

We respectfully request reconsideration of this rejection.

Rejections under 35 U.S.C. §101

Claims 1 - 7 and 14 - 19 have been cancelled from further consideration in the present amendment.

Rejections under 35 U.S.C. §103(a)

Regarding the rejections of Claims 8 - 13 under 35 U.S.C. §103(a) over previously-cited Sanchez in view of newly-cited Patel, we respectfully maintain our previous arguments and position regarding the teachings of Sanchez, as set forth in previous replies and amendments.

Regarding Patel, we believe Patel may not provide any conversion from a non-directory-access-protocol format to a format compatible with a directory access protocol (i.e. LDAP or X.500). For example, Patel states (our emphasis adde):

> "The format and type of content (including functions permitted on this channelidevice) presented will be based on this identification. This component, nevertheless, **does not do any modification to the content or participate in delivery of the content.**" (Patel, ¶0074)

In the Office Action, it was reasoned that Patel's ¶1056 disclosed an external value fetcher. There is no ¶1056 in Patel's disclosure; we believe this is a typographical error intended to refer to ¶0156. In ¶0156, there is a disclosure of an "interface dictionary", which defines which attributes must be fetched in "real time or in batch mode", and it defines how often (e.g. "frequency") the real time values should be updated.

As we best understand Patel's disclosure, they use an "adapter" to retrieve data external from their LDAP directory, as described at ¶¶ 0148, 0154, 0155, and 0166. However, we believe these paragraphs describe how external values are retrieved and then *stored in their LDAP directory*. Then, when a client requests that same information from the LDAP directory, it is retrieved from the LDAP directory and returned to the requester.

This presents several problems we have solved with our invention. First, if Patel's "frequency" parameter in their "interface dictionary" is a low value, when a requester requests a real time value, it may be relatively stale. Our invention, as claimed, always retrieves a fresh, current value *from the real time source,* not from within the LDAP directory. Thus, our invention actually returns the "real time" value to the requester, whereas we believe Patel's invention may return a value which was, at one time, real time but may have since grown stale.

Second, update operations made to attributes stored in LDAP directories consume considerable processor time and memory. So, if a real time value varies rapidly over time, and especially if many requesters are requesting the real time value in a short period of time, we believe Patel's invention's "adapters" will be updating LDAP attributes very often (if their "frequency" parameter is set appropriately to reflect actual real time values). As such, an LDAP directory containing (or referencing) very many real time external values will suffer serious performance issues under maximum load, such as slow response time, exceeding memory allocation, etc. We believe Patel's invention *stores* their retrieved real time values directly into

an LDAP directory (see Abstract, ¶¶0010, 0012 - 0014, 0065, 0067, 0071, etc.).

Our invention actually avoids *storing* the real time data in an LDAP or X.500 directory, thereby avoiding the processing hits of performing LDAP updates to attributes to hold the real time data. Instead of a process such as Patel's, our invention actually returns the retrieved and converted real time value directly to the requester, along with any non-real time data from the LDAP directory that was requested. This is why we have disclosed and claimed "converting" the value to a format compatible with a directory access protocol return – so that when the requester receives the returned parameter set, all of the data, including the real time value, will appear to have come from within the LDAP directory. Thus, "backwards compatibility" is achieved, while saving considerable processing resources and allowing large numbers of real time values to be associated with other LDAP directory-stored data (e.g. relatively static data).

We respectfully ask for the Examiner's reconsideration of these rejections over Sanchez in view of Patel.

Ordinary Skill Level. We are respectfully requesting an explicit determination by the Examiner of what is being considered to have been the ordinary skill level in the relevant art(s) at the time of our invention, and that analysis be placed into the record of examination. We believe this is critical to any argument or holding of obviousness, because it is not possible to determine *what* would have been obvious to do without quantifying the skill level of *who* would have found it obvious to do.

The Court reasoned in *In re Gentile* (Civ. App. No. 93-1086 (Fed Cir. Oct. 5, 1993)), that unless an explicit level of ordinary skill in the art is established during examination of a patent application, the ordinary level can be presumed from that which is indicated by the cited art.

More recently, the Court in *KSR v. Teleflex* reiterated the importance of "resolving" the ordinary skill level using *objective analysis* when applying 35 U.S.C. §103(a) in a rejection, as set forth in *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17 - 18. The Court in *KSR* clearly stated the need for explicit analysis to be made of record (our emphasis added):

> ". . . To determine whether there was an apparent reason to combine the known elements in the way a patent claims, it will often be necessary to look to interrelated teachings of multiple patents; to the effects of demands known to the design community or present in the marketplace; and **to the background knowledge possessed by a person having ordinary skill in the art.** To facilitate review, **this analysis should be made explicit**. . . . "

Please note our points in our previous reply that Messrs. Sanchez and Wang (Sanchez et al.) do not appear to persons of ordinary skill in the art, whereas there is no evidence or analysis

of record that indicates that it was ordinary to possess the ingenuity indicated by the number of issued patents and published patent applications as possessed by these two inventors. Please also note that we requested an explicit analysis of skill level in our last reply, but we are unable to find a response to our request in the present reply.

With respect to Messrs. Patel and Caiazzo and Ms. Holme (e.g. Patel, et al.), we find similarly that, according to the USPTO's online database, they are named individually or in combination in three issued US patents and three published patents pending. As such, we do not believe it would be appropriate to simply rely upon their disclosures as indicating the ordinary skill level in the art because this is no evidence of record that ordinarily skilled persons obtain three or more patents.

We contend that obtaining a patent is a relatively rare and distinguishing factor in the career of an engineer or scientist. Thus, we believe, and it appears the Courts hold, that explicit analysis of ordinary skill level should be placed in the record to facilitate future review of a rejection under 35 U.S.C. §103(a) should it be necessary.

For these reasons, we respectfully submit that we believe the cited art is drawn from inventors of *extraordinary* skill in the art, and thus their teachings do not indicate what was ordinary skill at the time of our invention. We are requesting an explicit determination of the ordinary skill level at the time of our invention.

Request for Indication of Allowable Subject Matter

We believe we have responded to all grounds of rejection and objection, but if the Examiner disagrees, we would appreciate the opportunity to supplement our reply.

We believe the present amendment places the claims in condition for allowance. If, for any reason, it is believed that the claims are not in a condition for allowance, we respectfully request constructive recommendations per MPEP 707.07(j) II which would place the claims in condition for allowance without need for further proceedings. We will respond promptly to any Examiner-initiated interviews or to consider any proposed examiner amendments.

Respectfully,

/ Robert Frantz /

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